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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,154	11/08/1999	SHUNPEI YAMAZAKI	SEL142	4834

7590

09/11/2002

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CHICAGO, IL 60606

EXAMINER
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LOKE, STEVEN HO YIN

ART UNIT	PAPER NUMBER
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2811

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/435,154

Applicant(s)

YAMAZAKI ET AL.

Examiner

Steven Loke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11-17, 19-22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-17, 19-22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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1. Claims 11-13 and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, line 13, the phrase "second gate electrode" is unclear whether it is being referred to "said second gate electrode".

In claim 13, the phrases "said first impurity region", "said second impurity region" and "said third impurity region" have no antecedent basis.

In claim 24, lines 9-10, it is unclear whether a second gate electrode formed adjacent to a second semiconductor layer with a second gate insulating film interposed therebetween.

In claim 26, the phrases "said first impurity region", "said second impurity region" and "said third impurity region" have no antecedent basis.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-9, 14-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (U.S. patent no. 6,274,887).

In regards to claims 1, 6, 14, 19, Yamazaki et al. discloses a goggle type display having a liquid crystal display (LCD) device having a CMOS circuit comprising an n-channel TFT and a p-channel TFT in figs. 1, 2A-5B, 12 and 13D. The CMOS circuit comprising: each gate electrode of the n-channel TFT and the p-channel TFT having a

first conductive layer (the inner portion of each of the gate electrodes [107, 113]) being in contact with a gate insulating film [106, 112], and a second conductive layer (the outer portion of each of the gate electrodes [107, 113]) being in contact with the gate insulating film and top and side surfaces of the first conductive layer; a semiconductor layer of the n-channel TFT comprising a first channel formation region [102], a pair of LDD regions [103] and first source and drain regions [105]; and a semiconductor layer of the p-channel TFT comprising a second channel formation region [110] and second source and drain regions [111], wherein a portion which the second conductive layer is in contact with the gate insulating film in the n-channel TFT partially overlaps the pair of LDD regions; wherein the portion which the second conductive layer is in contact with the gate insulating film in the n-channel TFT does not overlap the first source and drain regions; wherein a portion which the second conductive layer is in contact with the gate insulating film in the p-channel TFT is partially overlaps the second source and drain regions, wherein the semiconductor layer of the p-channel TFT has no LDD regions.

It would have been obvious for the liquid crystal is ferroelectric liquid crystal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

It would have been obvious for each of the gate electrodes of the n-channel TFT and the p-channel TFT comprising a first conductive layer and a second conductive layer because it depends on the method to make the gate electrodes.

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In regards to claims 2, 7, 15, 20, Yamazaki et al. further discloses the first conductive layers of the n-channel TFT and the p-channel TFT comprise tantalum (col. 10, lines 53-55).

In regards to claims 3, 8, 16, 21, Yamazaki et al. further discloses each of the first conductive layers of the n-channel TFT and the p-channel TFT comprises a single layer.

In regards to claims 4, 9, 17, 22, Yamazaki et al. further discloses the second conductive layers of the n-channel TFT and the p-channel TFT comprise tantalum (col. 10, lines 53-55).

4. Applicant cannot rely upon the foreign priority papers to overcome the above prior art rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyasaka et al. (U.S. patent no. 6,180,957).

In regards to claims 11, 13, Miyasaka et al. discloses a liquid crystal display device having an n-channel TFT and a p-channel TFT over a substrate in figs. 26, 49A, and 49B. It comprises: an n-channel TFT comprising: a first gate electrode formed adjacent to a first semiconductor layer with a first gate insulating film [5] interposed therebetween, the first semiconductor layer comprising a first channel formation region [2], a pair of LDD regions [9] and first source and drain regions [3]; wherein the first gate electrode partially overlaps the pair of LDD regions [9]; and the p-channel TFT comprising: a second gate electrode [6] formed adjacent to a second semiconductor layer with a second gate insulating film interposed therebetween, the second

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semiconductor layer comprising a second channel formation region and second source and drain regions [4, 10] being in contact with the second channel formation region, wherein the second gate electrode [6] partially overlaps the second source and drain regions [4, 10], and a wiring [8] is connected to at least one of the second source and drain regions [4, 10].

It would have been obvious for the liquid crystal is ferroelectric liquid crystal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In regards to claim 12, it would have been obvious to have the claimed materials for the first and second gate electrodes, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

6. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyasaka et al. (U.S. patent no. 6,180,957). in view of Johnson.

In regards to claims 24, 26, Miyasaka et al. differs from the claimed invention by not showing the CMOS circuit is used in a goggle type display device.

Johnson shows a goggle type LCD display device having a control circuitry and a display screen [12] in figs. 1 and 2.

Since Miyasaka et al. and Johnson teach a LCD device with control circuitry, it would have been obvious to have the CMOS circuit of Miyasaka et al. in the control circuit of Johnson because it increases the speed of the device.

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In regards to claim 25, it would have been obvious to have the claimed materials for the first and second gate electrodes of the MOSFETs, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Loke whose telephone number is (703) 308-4920. The examiner can normally be reached on 7:50 am to 5:20 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (703) 308-2772. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

sl  
September 7, 2002

Steven Loke  
Primary Examiner

A handwritten signature in black ink that reads "Steven Loke". The signature is written in a cursive, flowing style.